L. HAZARDOUS MATERIALS

The purpose of this section is to assess environmental impacts associated with the presence of hazardous materials[1] in the North Park Street Code area. Hazardous materials have historically been used, stored, and disposed of in the North Park Street Code area, and hazardous materials are known to be present there in areas of surface and subsurface soils and groundwater. Based on the age of the buildings in the North Park Street Code area, lead-based paint and asbestos containing building materials may be present in those structures. Disturbance of hazardous materials through construction or demolition activities could expose construction workers or the general public to various health risks. Hazardous materials or potentially hazardous materials left in place following construction could expose future residents and workers to health risks.

1. SETTING

The existing regulatory setting related to hazardous materials involves a complex framework of federal, State, and local agencies, laws, regulations, and policies. In the following discussion, these institutional and legal conditions are described first, followed by sections summarizing historical sources of hazardous materials in the North Park Street Code area, and its presently known areas of hazardous materials contamination.

a. Regulatory Agency Framework

The regulatory agency framework that applies to hazardous materials is presented first, followed by a discussion of worker health and safety.

(1) Regulation and Oversight of Hazardous Materials

Federal, state, and local laws and regulations regulate the use, storage, and disposal of hazardous materials, including management of contaminated soils and groundwater. The U.S. Environmental Protection Agency (EPA) is the federal administering agency for hazardous waste regulations. State agencies include the California Environmental Protection Agency (Cal EPA), Department of Toxic Substances Control (DTSC), the San Francisco Bay Regional Water Quality Control Board (RWQCB), the Air Resources Board (ARB), and the Bay Area Air Quality Management District (BAAQMD). Locally, the Alameda County Department of Environmental Health (ACDEH) is responsible for hazardous materials regulation enforcement, and the City of Alameda Fire Department acts as first responder to hazardous material incidents in the North Park Street Code area. Descriptions of each agency and its jurisdiction are summarized below.

[1] The California Health and Safety Code defines a hazardous material as "...any material that, because of its quantity, concentration, or physical or chemical characteristics, poses a significant present or potential hazard to human health and safety, or to the environment. Hazardous materials include, but are not limited to, hazardous substances, hazardous waste, radioactive materials, and any material which a handler or the administering agency has a reasonable basis for believing that it would be injurious to the health and safety of persons or harmful to the environment if released into the workplace or the environment." (Health and Safety Code Section 25501)

EPA. The EPA is responsible for enforcement and implementation of federal laws and regulations pertaining to hazardous materials. The federal regulations are codified primarily in Title 40 of the Federal Code of Regulations (40 CFR). The primary legislation includes the Resource Conservation and Recovery Act of 1976 (RCRA), the Comprehensive Environmental Response, Compensation and Liability Act of 1980 (CERCLA), and as amended by the Superfund Amendments and Reauthorization Act (SARA). These laws and associated regulations include specific requirements for facilities that generate, use, store, treat, transport, and/or dispose of hazardous materials. The EPA provides oversight for federal Superfund investigation/remediation projects, evaluates remediation technologies, and develops hazardous materials disposal restrictions and treatment standards. The EPA also develops guidelines for cleanup levels for both residential and commercial/industrial developments, which are published as Preliminary Remediation Goals (PRGs).

DTSC. The California EPA's Department of Toxic Substances Control (DTSC) is authorized by EPA to enforce and implement federal hazardous waste laws and regulations within the state of California. California regulations pertaining to hazardous materials generally equal or exceed federal regulations. Most State hazardous materials regulations are contained in Title 22 of the California Code of Regulations (CCR). The DTSC serves as the lead agency for certain soil and groundwater cleanup projects, especially of former industrial and commercial sites with a history of significant contamination. The DTSC provides oversight on toxic cleanup and remedial action for many sites and provides standards for performance of site investigations, preliminary endangerment assessments, human and ecological risk assessments, and remedial design and implementation. Cleanup levels for these sites are equal to or more restrictive than those mandated by federal regulation. The DTSC has developed land disposal restrictions and treatment standards for hazardous waste disposal in California.

RWQCB. The North Park Street Code area is located within the jurisdiction of the San Francisco Bay Regional Water Quality Control Board (RWQCB). The RWQCB is authorized by the Porter-Cologne Water Quality Control Act of 1969 to protect the waters of the State. The RWQCB may act as lead agency and provide oversight for sites where the quality of groundwater or surface waters is threatened. A permit from the RWQCB would be required for discharge of contaminated water (including contaminated groundwater from investigation and/or remediation activities or dewatering during construction) to storm drains, surface water, or land. A permit from the local sanitary treatment facility would be required if water were discharged to the sanitary sewer.

ARB. The California Toxic "Hot Spots" Information and Assessment Act of 1987 requires that industry provide information to the public on emissions of toxic air contaminants and their impact on public health. The Act requires the Air Resources Board (ARB) and local air quality districts, including the Bay Area Air Quality Management District for Alameda, to inventory sources of over 200 toxic air contaminants, to identify high priority emission sources, and to prepare a health risk assessment for each of these priority sources.

BAAQMD. The North Park Street Code area is also under the jurisdiction of the Bay Area Air Quality Management District (BAAQMD), the local enforcement agency for air quality regulations, including asbestos and lead paint abatement and removal activities.[2]

ACDEH. The Alameda County Department of Environmental Health (ACDEH) enforces state and local regulations pertaining to hazardous waste generators and risk management prevention programs. In addition, the ACDEH acts as lead agency to ensure proper remediation of leaking underground petroleum storage tank sites and certain other contaminated sites. ACDEH also enforces hazardous materials and waste management regulations within the City of Alameda.

Alameda Fire Department. The City of Alameda Fire Department does not enforce any hazardous materials regulations, but has a role as a first responder to hazardous materials incidents within the City.

(2) Worker Health and Safety

Worker health and safety is protected by both federal and State regulations. The Occupational Safety and Health Administration (OSHA) is the federal government agency for worker health and safety regulations. The California Department of Industrial Relations, Division of Occupational Safety and Health (DOSH) enforces State regulations. A description of each agency and its jurisdiction is summarized below.

OSHA. The Occupational Safety and Health Administration (OSHA) is responsible for enforcement and implementation of federal laws and regulations pertaining to worker health and safety. Under its jurisdiction, the Hazardous Waste Operations and Emergency Response (HAZWOPER) regulations, in 29 CFR 1910.120, require training and medical supervision for workers at hazardous waste sites. Additional regulations have been developed for construction workers pertaining to exposure to lead (29 CFR 1926.62) and asbestos (29 CFR 1926.1101) during construction activities.

DOSH. At the State level, the California Department of Industrial Relations, Division of Occupational Safety and Health (DOSH), formerly known as Cal/OSHA, is charged with enforcement of State regulations and supervision of workplaces in California that are not under direct federal jurisdiction. State worker health and safety regulations applicable to construction workers include training requirements for hazardous waste operations and emergency response (8 CCR 5192), lead (8 CCR 1532.1) and asbestos (8 CCR 1529) regulations, which are equal to or more restrictive than federal regulations.

[2] Bay Area Air Quality Management District Regulation 11, Rule 2.

b. Historical Sources of Hazardous Materials

(1) Historical Land Uses

Historical land uses in and adjacent to the North Park Street Code area were determined through a review of historic aerial photographs and topographic maps, as well as a site history report prepared for the North Park Street Code area.[3]

Since the late 1800s, a mix of maritime, residential, and commercial land uses have occupied most of the North Park Street Code area, including automobile serves and sales, warehousing, petroleum distribution and sales. Other historical land uses associated with the use of hazardous materials include the Alameda Beltline railroad that traveled through the area on Clement Street and Tilden Way to the Fruitvale Bridge.

(2) Asbestos and Lead-Based Paint Issues

A majority of buildings in the North Park Street Code area were constructed prior to the 1980s, when the use of lead-based paint (LBP) and asbestos containing building materials (ACMs) was curtailed. It is probable that lead paint and asbestos are present in North Park Street Code area buildings.

During demolition activities, lead paint and asbestos can pose a hazard to human health and the environment. Peeling lead paint or lead paint dust from demolition or remodeling activities can be ingested or inhaled. Lead is a toxic substance that can cause acute and chronic health effects. Inhalation of asbestos fibers can cause several diseases including asbestosis and mesothelioma, a form of lung cancer, among other ailments. Asbestos fibers can be released to the environment during demolition or remodeling activities.

(3) Current Land Uses Associated with Hazardous Materials in the North Park Street Code Area

A reconnaissance of the North Park Street Code area and adjacent properties was conducted to identify the locations of current land uses that may be associated with hazardous materials, as well as locations of sensitive receptors. Sensitive receptors are populations that may be especially affected by hazardous materials releases, such as children, the elderly, and the infirm. Residential areas, schools, daycare facilities, senior citizen facilities, clinics and hospitals would be considered areas with sensitive receptors, as would ecological resources like the Oakland Estuary and its associated wildlife.

[3] Bloomfield, Anne, 1987. Site History of the Encinal Marina Project; 2051 Grand Street, Alameda, California. March.

(4) Hazardous Material Use at and Adjacent to North Park Street Code Area

Sites with reported use, storage, generation, or disposal of hazardous materials were identified from an environmental database report prepared by Environmental Data Resources, Inc. (EDR), an environmental information service.[4] The database report compiled a listing of these sites based on information available in federal, State, and local regulatory agency computer databases.

A number of sites within and adjacent to the North Park Street Code area appear on federal, State, or local databases of facilities that have used, stored, or disposed of hazardous materials. The safe use, storage and disposal of common household and industrial chemicals does not impose an unacceptable risk or constitute a potential environmental impact if properly managed. A map of hazardous materials locations in and in the vicinity of the North Park Street Code area is shown in **Figure IV-L.1**.

(5) Hazardous Material Releases at and Near the Project Area

Identified hazardous material releases within the North Park Street Code area and within a ½-mile radius were identified from an environmental database report, regulatory agency files, and previous environmental investigations.

Environmental Databases. The EDR Report's environmental database list includes the site names and addresses, the database on which each site appears, the hazardous material released, whether the released material affected groundwater, and the regulatory/cleanup status for each of these sites are listed in the EDR Report for the North Park Street Code area.

Databases on which at least one of these sites appear include:

- The Comprehensive Environmental Response, Compensation, and Liability Information System - No Further Remedial Action Planned (CERCLIS-NFRAP), a database of potential hazardous waste sites that have been reported to the U.S. EPA and have been remediated sufficiently or do not require U.S. EPA oversight;
- The DTSC Cal-Sites database of properties that have either been investigated or remediated under DTSC oversight or identified as having land uses that may be associated with hazardous materials;
- The U.S. EPA Emergency Response Notification System (ERNS) database of reported releases of oil and hazardous substances;
- State and local Leaking Underground Storage Tank (LUST) databases containing sites with hazardous materials releases from underground storage tanks (USTs);
- The SWRCB Notify 65 database of facilities that have had a hazardous materials release that may affect drinking water quality; and,

[4] Environmental Data Resources, *The EDR Radius Map with GeoCheck: Alameda North Park Street Code*, October 10, 2003.

- The SWRCB Spills, Leaks, Investigations, and Cleanup (SLIC) database of sites with known or suspected groundwater pollution.

The types of hazardous materials released included petroleum hydrocarbons such as gasoline, diesel, motor oil and lubricating oils; associated volatile organic compounds (VOCs) such as benzene, toluene, ethylbenzene, and xylenes (BTEX); methyl tertiary-butyl ether (MTBE); metals; chlorinated solvents; and polychlorinated biphenyls (PCBs). The magnitudes and impacts of the reported releases ranges from small quantity surface spills on pavement, to releases from aboveground and underground storage tanks impacting subsurface soil and groundwater.

2. IMPACTS AND MITIGATION MEASURES

This section begins with a description of the criteria utilized to determine whether significant hazards and hazardous materials impacts would result, followed by a discussion of potential impacts and mitigation measures.

a. Significance Criteria

Implementation of the North Park Street Code would be considered to have significant impacts relating to hazards if it would:

- Create a significant hazard to the public or the environment through the routine transport, use or disposal of hazardous materials.
- Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment.
- Result in the emission or handling of hazardous materials, substances, or waste within ¼-mile of an existing or proposed school.
- Be located on a site that is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and would create a significant hazard to the public or environment.
- Be inconsistent with any applicable Airport Land Use Plan (including regulations applicable within safety zones designated by the Alameda County ALUC) or otherwise result in an airport-related safety hazard for people residing or working within the Plan area.
- Expose people or structures to wildland fire hazards.

b. Less-than-Significant Impacts

No significant impacts related to airport-related safety hazards or wildland fire hazards were identified for the proposed North Park Street Code area. No airports are located within two miles of the area; implementation of the North Park Street Code would not create any airport-related safety hazards for people residing or working in the area. No wildlands are present at, or adjacent to, the

North Park Street Code area, and no new wildlands are to be created as part of implementation of the North Park Street Code. Therefore, no people or structures would be subjected to wildland fire hazards as a result of its implementation.

The North Park Street Code land use designations would limit the types of uses, which could include facilities that may use significant quantities of hazardous materials. However, any future land uses within the North Park Street Code area that involve the use, storage, transport, treatment, or generation of hazardous materials shall be required to comply with federal, state, and local requirements for managing hazardous materials. Depending on the type and quantity of hazardous materials, these requirements could include the preparation of, implementation of, and training in the following plans, programs, and permits:

- ***Hazardous Materials Business Plan (Business Plan)***. Facilities that use, store, or handle hazardous materials in quantities greater than 500 pounds, 55 gallons, or 200 cubic feet are required to prepare a Business Plan. The Business Plan shall contain facility maps, up-to-date inventories of all hazardous materials for each shop/area, emergency response procedures, equipment, and employee training.
- ***Hazardous Waste Generator Requirements***. Facilities that generate more than 100 kilograms per month of hazardous waste, or more than 1 kilogram per month of acutely hazardous waste, must be registered under RCRA. DTSC administers hazardous waste generator registration in California.
- ***Contingency Plan***. All facilities that generate hazardous waste must prepare a Contingency Plan. The Contingency Plan identifies the duties of the facility Emergency Coordinator and identifies and gives the location of emergency equipment. It also includes reporting procedures for the facility Emergency Coordinator to follow after an incident.
- ***California Accidental Release Prevention Program***. Facilities that use significant quantities of acutely hazardous materials must prepare an Accidental Release Prevention Program if there is a significant likelihood that this use may pose an accident risk. The Program must include a description of acutely hazardous material accidents occurring at the facility within the past three years, and a description of equipment, procedures, and training to reduce the risk of acutely hazardous materials accidents.
- ***Injury and Illness Prevention Plan***. The California General Industry Safety Order requires that all employers in California prepare and implement an Injury and Illness Prevention Plan which shall contain a code of safe practice for each job category, methods for informing workers of hazards, and procedures for correcting identified hazards.
- ***Emergency Action Plan***. The California General Industry Safety Order requires that all employers in California prepare and implement an Emergency Action Plan.

The Emergency Action Plan designates employee responsibilities, evacuation procedures and routes, alarm systems, and training procedures.

- ***Fire Prevention Plan***. The California General Industry Safety Order requires that all employers in California prepare and implement a Fire Prevention Plan. The Fire Prevention Plan specifies areas of potential hazard, persons responsible for maintenance of fire prevention equipment or systems, fire prevention housekeeping procedures, and fire hazard training procedures.
- ***Hazard Communication Plan***. Facilities involved in the use, storage, and handling of hazardous materials are required to prepare a Hazard Communication program. The purpose of the Hazard Communication program is to ensure safe handling practices for hazardous materials, proper labeling of hazardous materials containers, and employee access to Material Safety Data Sheets (MSDSs).
- ***Aboveground and Underground Storage Tank Permits***. Facilities with aboveground or underground storage tanks require a permit. Other plans, such as a Spill Prevention Control and Countermeasures Program, may be required depending on the size, location, and contents of the tank.
- ***Storm Water Pollution Prevention Plan- SWPPP.*** Boatyards and Boat Maintenance areas shall have a SWPPP.

Therefore, due to existing rules, regulations, and permit requirements, the future use, storage, transportation, or generation of hazardous materials in the North Park Street Code area represents a **less-than-significant** impact.

Demolition or renovation of existing buildings, or removal of asbestos cement pipe, could release lead-based paint dust and asbestos fibers. Lead-based paint and asbestos-containing building materials are known to be present in buildings and pipes in the North Park Street Code area. During demolition, removal or renovation of these materials, lead dust and asbestos fibers could be released into the air, potentially affecting construction workers.

State and federal regulations require the abatement of all asbestos-containing materials prior to demolition or renovation activities that would disturb them. State regulations (Title 8, California Code of Regulations, Section 1529) protect construction worker safety where asbestos-containing materials are present.

Loose and peeling lead-based paints would require removal prior to renovation/demolition activities. Paints that are adhering to their surfaces do not require abatement and can be disposed of as regular construction debris regardless of their lead content. State regulations require that air monitoring be performed during and following renovation or demolition activities at sites containing lead-based paint (Title 8, California Code of Regulations, Section 1532.1). Appropriate modifications to renovation/demolition activities would be required if airborne lead levels exceed the current federal OSHA action level of 30 $\Phi g/m^3$ (calculated as an 8-hour, time-weighted average). Adherence by

future developers within the North Park Street Code area and by the City to existing regulations requiring abatement of lead and asbestos hazards and institution of standard worker health and safety procedures during demolition and renovation activities would reduce this impact to a less-than-significant level. No additional mitigation is required.

c. Significant Impacts

The significant or potentially significant impacts related to hazards and hazardous materials that would result from implementation of the proposed North Park Street Code are discussed below.

Impact HAZ-1: Contaminated soils and groundwater have the potential to exist on many parcels located within the North Park Street Code area. These materials could present a health risk to construction workers and/or future workers and residents of the North Park Street Code area. This is a potentially significant impact.

As discussed above, many of the properties located within the North Park Street Code area have been identified as containing some type of hazardous material risks. This material could potentially present a health risk to construction workers and future site users.

> **Mitigation Measure HAZ-1:** Prior to the approval of any specific development projects within the North Park Street Code area, documentation from a qualified professional shall be provided to the City of Alameda stating that adequate soils and ground water investigations and, where warranted, remediation, have been conducted to ensure that there will be no significant hazard related risks to future site users.
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> If the soil and groundwater investigations indicate that hazardous materials are present and pose a risk to construction workers and future site users, the following additional mitigation measures shall be implemented, and the City of Alameda will refer the site to the appropriate State and County agencies (such as Alameda County Environmental Health, the State Department of Toxic Substances Control and/or the San Francisco Bay Regional Water Quality Control Board) for oversight of the specific development project.
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> **Mitigation Measure HAZ-1a:** If required as a result of the information obtained from **Mitigation Measure HAZ-1**, the City shall condition the subject development project to record a restrictive covenant prohibiting the installation or use of water wells into the shallow groundwater at the site for drinking water prior to transfer of the property.
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> **Mitigation Measure HAZ-1b:** If required as a result of the information obtained from **Mitigation Measure HAZ-1**, the City shall condition the subject development project to require preparation by a qualified registered professional of a Site Management Plan (SMP) for the subject site as a condition of its approval as a specific development project. The SMP would provide site specific information for contractors (and others) developing the site that would improve their management of environmental and health and safety contingencies. Topics covered by the SMP shall include, but not be limited to:

- Land use history, including known hazardous material use, storage, disposal, and spillage, for specific areas within the site.
- The nature and extent of previous environmental investigation and remediation at the site.
- The nature and extent of ongoing remedial activities and the nature and extent of unremediated areas of the project site, including the nature and occurrence of marsh crust and hazardous materials associated with the dredge material used as fill at the site.
- A listing and description of institutional controls, such as the City's excavation ordinance and other local, State, and federal laws and regulations, that will apply to development of the site.
- Requirements for site-specific Health and Safety Plans (HASPs) to be prepared by all contractors at the site. The HASPs should be prepared by a Certified Industrial Hygienist and would protect construction workers and interim site users adjacent to construction activities by including engineering controls, monitoring, and security measures to prevent unauthorized entry to the construction site and to reduce hazards outside the construction site. The HASPs would address the possibility of encountering subsurface hazards and include procedures to protect workers and the public. If prescribed exposure levels were exceeded, personal protective equipment would be required for workers in accordance with DOSH regulations.
- A description of protocols for the investigation and evaluation of previously unidentified hazardous materials that may potentially be encountered during project development, including engineering controls that may be required to reduce exposure to construction workers and future users of the site.
- Requirements for site specific construction techniques at the site, based on proposed development, such as minimizing the transport of contaminated materials to the surface during construction activities by employing pile driving techniques that consist of driving the piles directly without boring, where practical.

The SMP shall be distributed to all contractors at the development site; implementation of the SMP shall be a condition of approval for excavation, building, and grading permits at the site. The contractors will be required to hold a daily safety meeting with all construction workers and subcontractors on lands identified with Hazardous Material risks.

Implementation of these mitigation measures would reduce the impact of contaminated soil and ground water to **less than significant** levels.